Terminal and Printer Types for PCN Health Network

Equipment	Emulation	PCN Terminal Type
Wyse 60	wyse60	wy60epc
Wyse 50	wyse50	wy50epc
Wyse 370	wyse370	wy370epc
At&t 605	605	615
At&t 705	705	615
At&t 615	615	615
Link wt80	wyse60	linkdt (no mouse)
Link wt80	wyse60	linkaw (mouse)
Link wt6		
Adds monocrome	705	addsdt
Adds color	705	addsdt (no mouse)
Adds color	705	addsaw (mouse)
Pcs Tun Emul	ansi	tunemul
okidata321	epson	ok390 (for narrow carriage)
okidata320	epson	ok390 (for narrow carriage)
okidata390	epson	ok390 (for narrow carriage)
okidata391	epson	ok390 (for narrow carriage)
okidata393	epson	ok393
okidata395	epson	ok393
at&t 477	477	477
at&t 475	475	475
hpdeskjet	n/a	hpdeskjet
hplaserJet	n/a	hplaser2
okidata laser	n/a	hplaser2p

The program modent in PCN will allow you to change the carriage width to 80 or 132 col.

Proper Connector Configuration

Ports Board	Connector	Device	Connector
Digiboard (rs232)	C12	terminal/printer	C10
	C12	modemor mux	C09
	C12	PC	C10 9or25 pin
	C12	HP printer	C10 (9pin)
IBM Ran	N/A	terminal/printer	IBM
	N/A	modem/mux	CMC
	N/A	PC	IBM 9pin
Computer serial ports	ST 9pin	modem	ST
	C09 9pin	terminal/printer	C10
Specialix I08 rj45	n/a	terminal/ printer	SRJ12-T
	n/a	modem/mux	SRJ12-M
Remote mux	ST	terminal/printer	ST
	ST	PC	ST 9 or 25 pin
	ST	HP printer	ST 9pin

PROPER CONNECTOR DEFINITIONS

Digiboard (rs232)	C12	terminal/printer	C10
	C12	modem/mux	C09
	C12	PC	C10 9 or 25 pin
	C12	HP printer	C10 9 pin
IBM RAN RJ45	N/A	terminal/printer	IBM
	N/A	modem/mux	CMC
	N/A	PC	IBM 9 pin
Specialix I08 rj45	N/A	terminal/printer	~~SRJ12-T~~ SPMTA-T
	N/A	modem/mux	~~SRJ12-M~~ SPMTA-M
Computer Serial Ports	ST 9pin	modem/mux	ST
	C09 9pin	terminal/printer	C10
Remote Multiplexor	ST	terminal/printer	ST
	ST	PC	ST 9 pin
	ST	HP printer	ST 9 pin
Link Wt80	ST	modem	ST
	L09 9pin	local printer	L09 25 pin
Wyse60 (aux port)	ST	local printer	ST
Wyse 370 (aux port)	C10	local printer	C09
AT&T (aux port)	ST	local printer	ST

C332

Also see the connector document for additional uses

Medical Monitor – Terminal
PC 2 - green
3 blue
5 black

VC014338-01		VC014339-01		VC014340-01	
	DB25 M		DB25 M		DB9 (F)
	Modem/ Mux Channel Port		WT-6/80, Printer		P-4810E
BLUE	8	Blue	8	BLUE	1
orange	20	orange	6	orange	6
Black	6	BLACK	4	Black	4
Red	7	Red	7	Red	5
green	2	green	3	green	2
Yellow	3	yellow	2	Yellow	3
Brown	4	Brown	5	Brown	7
White	5	White	20	White	8

VC014341-01		VC014342-01		VC014343-01	
	DB9 (M)		DB25 (F)		DB9 (F)
	C-332/0 C-321/0 C-301		PC Workstation		C-342/PC Workstation
Blue	8	Blue	8	Red	5
orange	6	orange	6	green	2
Black	9	Black	20	Yellow	3
Red	1.7	Red	7		
green	3	green	3		
Yellow	2	Yellow	2		
Brown	5	Brown	5		
White	4	White	4		

Special X

1.4.2 RS232 RJ45 Non-shielded Cables (MTA/R) OLd

VC010727-01		VC010728-02		VC010729-01	
	DB25 (M)		DB25 (M)		DB9 (F)
	Modem/ Mux Channel Port		WT-6/80, Printer		P-4810E
Blue	20	BLUE	6	BLUE	6
orange	8	orange	8	orange	1
BLACK	3	Black	2	BLACK	3
Red	4	Red	5	red	7
green	7	green	7	green	5
Yellow	2	Yellow	3	Yellow	2
Brown	6	Brown	4	Brown	4
White	5	White	20	White	8

VC010923-01 see note below		VC012861-01 see note below		VC013052-01	
	P2 DB9 (M)		DB25 (F)		DB9 (F)
Non-shielded	C-332/0 C-321/0 C-301	Non-shielded	PC Workstation	Non-shielded	C-342/PC Workstation
BLUE	6	Blue	20	BLACK	3
orange	8	orange	8	green	5
BLACK	2	BLACK	2	Yellow	2
Red	5	Red	5		
Green	1.7	green	7		
Yellow	3	Yellow	3		
Brown	9	Brown	6		
White	4	White	4		

812-483-0800

Note: VC010923-01 and VC012861-01 are modified from previously published specifications. In VC010923-01, pins 4 and 5 in P2 are reversed. In VC012861-01, pins 6 and 20 in P2 are reversed.

330-535-6423

CMC	IBM-P	OKI	C10	9pin9-25	SRJ12-T
1-black	2-green	2-green	2-black	1-blue	2-black
2-red	3-red	3-black	3-green	2-orange	3-yellow
3-green	4-blue	4-orange	4-white	3-black	4-brown
4-orange	5-orange	5-white	5-orange	4-red	5-red
5-brown	6-white	6-ties to 20	6-red	5-green	6-tie to 5
7-yellow	7-yellow	7-brown	7-brown	6-yellow	7-green
8-blue	8-tie to 6	8-red 8-red	8-yellow	7-brown	8-N.C
20-white	20-brown	20-yellow	20-tie to 6	8-white	20-orange

C09	C12 (female)	IBM	9pinC10	25pin 9-25	SRJ12-M
1-blue	1-blue	1-black	1-yellow	2-black	2-yellow
2-green	2-green	2-green	2-green	3-orange	3-black
3-black	3-black	3-red	3-black	4-brown	4-red
4-orange	4-orange	4-brown	4-tied to 6	5-white	5-brown
5-white	5-white	5-orange	5-brown	6-yellow	6-N.C.
7-brown	7-brown	7-yellow	6-red	7-green	7-green
8-red	8-red	8-white	7-white	8-blue	8-orange
20-yellow	20-yellow	20-blue	8-orange	20-red	20-tie to 4

9pinC09	R16T	R16M	ST25	ST09	SRJ12-T9pin
1-red	2-yellow	2-green	2-blue	1-red	1-N.C.
2-black	3-green	3-yellow	3-green	2-green	2-yellow
3-green	4-white	4-brown	4-black	3-blue	3-black
4-yellow	5-brown	5-white	5-orange	4-yellow	4-orange
5-brown	6-orange	6-black	6-white	5-brown	5-green
6-N.C.	7-red	7-red	7-brown	6-white	6-tie to 8
7-orange	8-blue ties to 20	8-blue	8-red	7-black	7-brown
8-white	20-black ties to 8	20-orange	20-yellow	8-orange	8-red

705-45mux	L99pin	L925pin	L109pin	L1025pin	Hp-9IBM
2-green	1-blue	1-blue	1-blue	1-blue	2-green
3-yellow	2-orange	2-orange	2-orange	2-black	3-red
4-brown	3-black	3-black	3-black	3-orange	4-white
5-white	4-red	5-brown	4-red	4-red	5-yellow
6-black	5-green	6-red	5-green	5-brown	6-blue
7-red	6-yellow	7-green	6-yellow	7-green	8-brown
8-N.C.	7-brown	8-tie to 5	8-brown	8-yellow	
20-tie to 6		20-yellow		20-tie to 4	

Emulterm	Emulmod	HP-9CMC	SPMTA-T	IBM-9pin	SPMTA-M
1-orange	2-green	2-blue	2-yellow	1-white	2-green
2-black	3-black	3-green	3-green	2-red	3-yellow
3-green	4-white	4-red	4-black	3-green	4-brown
4-blue	5-blue	5-brown	5-brown	4-blue	5-white
5-white	6-prt tie 20to6	6-yellow	6-orange	5-yellow	6-black
6-brown	7-yellow	8-black	7-red	6-none	7-red
7-yellow	8-brown		8-blue	7-brown	8-blue
20-red	20-red		20-white	8-orange	20-orange

RJ45 DIGI
C332
2-6 Red
3-Red
7-yellow

CMC	IBM-P	OKI	C10	9pin9-25	SRJ12-T
1-black	2-green	2-green	2-black	1-blue	2-black
2-red	3-red	3-black	3-green	2-orange	3-yellow
3-green	4-blue	4-orange	4-white	3-black	4-brown
4-orange	5-orange	5-white	5-orange	4-red	5-red
5-brown	6-white	6-ties to 20	6-red	5-green	6-tie to 5
7-yellow	7-yellow	7-brown	7-brown	6-yellow	7-green
8-blue	8-tie to 6	8-red	8-yellow	7-brown	8-N.C.
20-white	20-brown	20-yellow	20-tie to 6	8-white	20-orange

C09	C12 (female)	IBM	9pinC10	25pin 9-25	SRJ12-M
1-blue	1-blue	1-black	1-yellow	2-black	2-yellow
2-green	2-green	2-green	2-green	3-orange	3-black
3-black	3-black	3-red	3-black	4-brown	4-red
4-orange	4-orange	4-brown	4-tied to 6	5-white	5-brown
5-white	5-white	5-orange	5-brown	6-yellow	6-N.C.
7-brown	7-brown	7-yellow	6-red	7-green	7-green
8-red	8-red	8-white	7-white	8-blue	8-orange
20-yellow	20-yellow	20-blue	8-orange	20-red	20-tie to 4

9pinC09	R16T	R16M	ST25	ST09	SRJ12-T9pin
1-red	2-yellow	2-green	2-blue	1-red	1-N.C.
2-black	3-green	3-yellow	3-green	2-green	2-yellow
3-green	4-white	4-brown	4-black	3-blue	3-black
4-yellow	5-brown	5-white	5-orange	4-yellow	4-orange
5-brown	6-orange	6-black	6-white	5-brown	5-green
6-N.C.	7-red	7-red	7-brown	6-white	6-tie to 8
7-orange	8-blue ties to 20	8-blue	8-red	7-black	7-brown
8-white	20-black ties to 8	20-orange	20-yellow	8-orange	8-red

705-45mux	L99pin	L925pin	L109pin	L1025pin	Hp-9IBM
2-green	1-blue	1-blue	1-blue	1-blue	2-green
3-yellow	2-orange	2-orange	2-orange	2-black	3-red
4-brown	3-black	3-black	3-black	3-orange	4-white
5-white	4-red	5-brown	4-red	4-red	5-yellow
6-black	5-green	6-red	5-green	5-brown	6-blue
7-red	6-yellow	7-green	6-yellow	7-green	8-brown
8-N.C.	7-brown	8-tie to 5	8-brown	8-yellow	
20-tie to 6		20-yellow		20-tie to 4	

Hp 9IBM Remote
2 - Red
3 - Green
4 - Blue
5 Yellow
6 - White
8 - Orange

Emulterm	Emulmod	HP-9CMC	SPMTA-T	IBM-9pin	SPMTA-M
1-orange	2-green	2-blue	2-yellow	1-white	2-green
2-black	3-black	3-green	3-green	2-red	3-yellow
3-green	4-white	4-red	4-black	3-green	4-brown
4-blue	5-blue	5-brown	5-brown	4-blue	5-white
5-white	6-prt tie 20to6	6-yellow	6-orange	5-yellow	6-black
6-brown	7-yellow	8-black	7-red	6-none	7-red
7-yellow	8-brown		8-blue	7-brown	8-blue
20-red	20-red		20-white	8-orange	20-orange

New Specifics

See page 3 back

Wallplates

w/blue blue w/orange orange w/green green w/brown brown

RJ45 when cable directly connected to a wallplate (from l to r with the clip down)

1	2	3	4	5	6	7	8
w/orange	orange	w/green	blue	w/blue	green	w/brown	brown

RJ45 to RJ45 on plenum cable (from left to right with the clip down)

1	2	3	4	5	6	7	8
w/blue	blue	w/orange	orange	w/green	green	w/brown	brown

CMC-	connects communication device to a ran
IBM-P	connects printer directly to ran
OKI-	use for Okidata printer in place of a C09 oki uses pin 6
C10-	use on digiboards in combination with a C09 or C12 for terminals and printers
C09-	use on digiboards in combination with a C10 for terminals and printers
C12-	use on digiboards with C10 for terms and printers, with C09 for communication device
IBM-	use on a ran to connect terminals
R16-T-	connects terminals and printers to Specialix RTA
R16-M-	connects communication devices to Specialix RTA
ST25-	use to connect peripheral to mux at the remote side also. modem to terminal
ST09-	same as ST25
SRJ12-T	use for terminal or printer connected to Specialix I08 and Modular Terminal Adapters
SRJ12-M-	use for communication devices connected to Specialix I08 and Modular Terminal Adapters
25pin9-25	use in conjunction with 9pin9-25 to convert a 25 pin connector to a 9pin
705-45mux	use to connect 705 RJ45 port to modem or mux
L9-9pin	use with a L9-25pin to connect a terminal or a printer to an Altos 1000 or 5000 or TCU
L10-9pin	use with a L10-25pin to connect a modem or mux to an Altos 1000 or 5000 or TCU
Hp-9IBM	use on a Hplaser printer 9 pin connection on an IBM ran
HP-9CMC	use on hplaser 9pin thru mux. ran to cmc on mux and remote mux st25 to hp9cmc on printer
Emulterm	use to connect a terminal or printer directly to an EMULEX terminal server
Emulmod	use when connecting an Emulex term server to a mux for the main site, at remote use ST25
SPMTA-T	Use ona specialix modular terminal adapter "MTA" when connecting a terminal
SPMTA-M	Use ona specialix modular terminal adapter "MTA" when connecting a modem

RS232 PIN GUIDE

1-protective ground	9-data set testing	18-undefined
2-transmitted data	10-data set testing	19-sec. request to send
3-received data	11-undefined	20-data terminal ready
4-request to send	12-sec. received line signal detector	22-ring indicator
5-clear to send	13-sec. clear to send	23-data signal rate selector
6-data set ready	14-sec. transmitted data	24-transmitter signal elemnt timing
7-signal ground	15-transmitted signal element timing	25-undefined
8-data carrier detect	16-sec. received data	17-receiver signal element

MT932 thru MT2834 modems

To communicate asynchronously with modem, set switches:
3,7,8,9,11,12,15 Down; All other switches up.

Synchronous operation,(used with a mux) set switches:
3,9,11 Down, all others up.

ZDX modem - Set initially for factory defaults - AT&F then set the $mb and $sb to match serial port baud and AT&E13 then at&w to write the options

MT56DSU modem - DDS synchronous multiplexor operation
19.2k- switches 1,4,13,16 down, all others up
56k - switches 4,13,16 down, all others up

MT64DSU modem - DDS synchronous multiplexor operation
19.2k- switch 1 up, all others down
56k- switch 2 up, all others down
64k- swiches 1, 2 up, allothers down

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* Modems connected to computer serial ports must have the serial baud rate set to match the computer baud rate. The command is AT$SBxxxxx, where xxxxx is baud rate.

* Modems that will be used for Electronic Claims should have Pacing turned off (AT&E12) and Data Compression turned off (AT&E14).

* Dialup modems should have their main baud rate no higher than 19200. Command is AT$MB19200.

* Store phone number in modem. ATDT"phone number"Nx stores "phone number" in position x of the phone number memory in modem.

* Dial stored phone number, ATNx dials the phone number at position x in phone number storage.

* DTR dialing- Modem dials phone number stored at position zero in phone number storage when DTR becomes true. Command = AT$D1.

* Dialup modems used with multiplexors should be set for factory defaults, then change main baud rate to no greater than 19200 baud. The remote site modem should be set for DTR dialing and main site phone number set in phone number storage positon 0(zero).

* To check or change options to a remote modem dial in and when you get connected type %%%at, this will give you the option of data or command mode, select command and enter the password of MODEMSETUP, (must be caps) this connects you in command mode just like having a terminal directly connected to the modem. when finished type atO (capital o) and will take you back.

* Any modem that is used for Support or ECS **should not** be configured as an Automatic Call Unit (ACU) in the /usr/lib/uucp/Devices file. UUCP will change the settings of an ACU defined modem and can mess up ECS and Support communication.

File /usr/lib/uucp/Devices must have a direct entry for the tty port:

Direct ttyxxx - yyyy direct where yyyy is baud rate

File /dev/ttyxxx must have permissions:

chmod 777 /dev/ttyxxx

If a lock file exits for this tty, remove it from /usr/spool/uucp

Command is **cu -lttyxxx**

A CONNECTED message should be received. At this point, if cabling and modem set properly, communication with modem can take place.

To disconnect type **~. enter**

Useful modem commands:

AT&F - set factory defaults
AT&W0- Store modem settings in non volatile memory
ATDTx- Dial phone number x
ATL5- Display some modem settings - Hayes modems use at@v
ATL- Display phone number storage
AT$SBxxxx Set serial port baud rate
AT$MBxxxx Set modem baud rate
AT$D1- Set DTR dialing
ATNx- Dial phone number stored at position x

ATH0 – disengage

SOME OTHER MODEM SETUPS:

696E Modem, Dialup, With Terminal and Local Printer.

Factory default, ATE1&E5&E7&E8&E10&E13&E14$BA1

* Dial In-to Modem, Connected To Computer, That Will Not Disconnect When Exiting From Unix (Control D or Exit) use following command:

AT&D0 which causes modem to ignore DTR from computer.

Modify or silence results codes. Useful to eliminate many login messages and bad login userid's when modem answers a call. Be careful with these. If ATQ1 is used, there will be no response from modem after it receives a command.

ATV0- Result code sent as digits (terse).
ATQ1- Result codes suppressed (quiet).

Multitech 224 modem

At&F- Load factory defaults
AT&E1- Set Auto-Reliable Mode
AT&W0- Store

Set all switches up except 1,3,8 down.

If used with St. E Link set all swicthes up except 1,3,6,8 down

ZDX Modem for ECS on Altos 500 or 1000 systems

AT&F- Factory default
AT$SBxxxx- Serial Baud Rate
AT&C0- Force on Carrier Detect and Data Set Ready
AT&W0- Store

. LINK WT80 COLOR SETUP

One example for color setup.

S.T.J De

In setup, press F8

At the top of display:

Wprt Intensity Dimr	Dim	Atttribute	Char
Wprt Reverse	Off	Intensity	Off
Wprt Underline	Off	Background	Dark
Wprt Blink	Off	Overscan Intensity	Off

Press Page Down

In the center of the display are atttributes (in squares). The square outlined in red is the attribute whose color is being setup. Below the attributes are the colores for foreground and background. Right/left arrow keys move the under-bracket pointer to the color desired. Up/down arrows select forground field and background field. Tab moves to the next attribute. Select the colors as shown below.

	Foreground	Background
Norml	White	Black
Revse	Yellow	Blue
Undln	White	Blue
UL+Rv	White	Magenta
Dim	Cyan	Black
Dm+Rv	White	Magenta
Dm+Ul	White	Magenta
D+U+R	White	Magenta
Overscan		Black

Press page down

	Black	Black
	Yellow	Yellow
Wallp	White	Black
Title	Yellow	Red
Bar	Magenta	Red
Bder1	Red	Black
Bder2	Cyan	Black
Button	White	Blue
Overscan		Black

Press S to save setup

The following files must be edited on both servers and names need to be consistent.

vi /etc/hosts
192.168.1.1 scoserver
192.168.1.109 aixserver
/etc/hosts: END

vi /etc/hosts.equiv
aixserver
scoserver
/etc/hosts.equiv: END

vi /.rhosts
scoserver root
aixserver root
/.rhosts: END

chmod 600 /.rhosts
-rw------- 1 root system 24 Dec 26 12:46 /.rhosts

rcp -r scoserver:/usr2/

rcp -r [redacted]/* .

cetvp.exe